

# CABINET



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| Report subject    | <b>Poole Bay Beach Management Scheme</b>  |
| Meeting date      | 9 October 2019  |
| Status            | Public Report   |
| Executive summary | <p>Poole Bay Beach Management Scheme (BMS) is a project to provide coast protection to the coastal frontages of Poole and Bournemouth. Without the continuation of coast protection works, over the next 100 years, significant numbers of residential and commercial properties would be lost to erosion along with highways and supporting infrastructure. The potential adverse impact to the tourism economy and amenity benefit would be of a scale of local, regional and national importance.</p> <p>The overall programme of works is being delivered in distinct phases between 2015 and 2040 with the total project cost estimated to be in the region of £50m. Funding of the project will include Flood Defence Grant in Aid (FDGiA) and a proportion through Partnership Funding from the Council.</p> <p>The scheme commenced in 2015 with Phase 1 of the BMS being successfully led and delivered by Bournemouth Borough Council. This was funded through a Project Appraisal Report (PAR) as an Outline Business Case subsequently approved by the Environment Agency for Phase 1 of the project (2015/16 to 2019/20).</p> <p>Cabinet is asked to approve the submission of the Outline Business Case to the Environment Agency for funding the coast protection works identified under Phase 2&amp;3 combined between 2020/21 and 2030/31 as a continuation of the project. As BCP Council are a Local Authority Risk Management Authority there is no requirement for a subsequent Full Business Case for Phase 2&amp;3 combined to be submitted due to the value of the Outline Business Case.</p> |

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| <b>Recommendations</b>     | <p><b>It is RECOMMENDED that:</b></p> <p><b>(a) The Council, as the Coast Protection Authority, submits to the Environment Agency the Outline Business Case for funding approval for the coast protection works identified under Phase 2&amp;3 combined between 2020/21 and 2030/31.</b></p> <p><b>That Cabinet recommends to Full Council:</b></p> <p><b>(b) Provided the application for Flood Defence Grant in Aid (FDGiA) is successful, to fund £3.3m between 2020/21 and 2026/27 in conjunction with the EA's forward capital programme from Council Resources.</b></p> |
| Reason for recommendations | A requirement for BCP Council as the Coast Protection Authority to implement appropriate works under the local Flood & Coastal Erosion Risk Management Strategies, namely the Shoreline Management Plan (SMP2) 2011 and the Poole & Wareham FCRM Strategy 2014.   |
| Portfolio Holder:          | Councillor Dr Felicity Rice (Portfolio Holder for Environment and Climate Change)   |
| Corporate Director         | Bill Cotton (Executive Director Regeneration & Economy)   |
| Contributors               | <p>Anthony Kirby, Engineering &amp; Major Contracts Manager, Growth &amp; Infrastructure</p> <p>Daniel Povey, Partnership Financial Services Manager</p>  |
| Wards                      | Poole Bay coastline frontage from Hengistbury Head in the east to the Sandbanks peninsula in the west.  |
| Classification             | For Decision and Recommendation   |

## Background

1. The coastal towns of Bournemouth and Poole within the area of Poole Bay, from Hengistbury Head in the east to the Sandbanks peninsula in the west, are built on a coastline which is currently eroding at approximately 1m per year. Coastal defence works over the past 100 years to protect the cliffs and cliff top properties has included the building of seawalls, the strategic placement of groyne structures and the maintenance of an imported beach consisting of a mixture of natural marine sands and gravels.
2. The Shoreline Management Plan (SMP2) from 2011 set the policies for the preceding 100-year period to manage the coastal erosion risk through a "Hold the Line" approach. The subsequent Poole & Wareham FCRM Study from 2013, commissioned by the Environment Agency, determined the broad outline which was to "sustain" the level of protection as the sea level rises with groynes and beach replenishment.

3. The Bournemouth Beach Management Scheme (2015/16 to 2019/20) as Phase 1 of the project and the planned Poole Bay Beach Management Scheme (2020/21 to 2030/31) as a combined Phase 2/3 of the project include cyclic beach replenishment to maintain a beach level that provides the primary coastal erosion measure. This is complimented by a groyne renewal programme as the secondary level of coastal erosion protection, providing the replacement of life expired structures over the period of the project to improve the retention of the beach fill material off shore and protection of the seawall. The overall programme of works is being delivered in distinct phases between 2015 and 2040 with the total project cost estimated to be in the region of £50m.
4. Without the continuation of coast protection works over this 100-year period, significant numbers of residential and commercial properties would be lost to erosion along with highways and supporting infrastructure. The potential adverse impact to the tourism economy and amenity benefit would be of a scale of local, regional and national importance.

### **Bournemouth Beach Management Phase 1 (2015/16- 2019/20)**

5. Prior to Local Government Re-organisation in April 2019, Bournemouth Borough Council approved the submission of the Outline Business Case for to the Environment Agency for Phase 1 of the project that covered beach replenishment and a groyne replacement programme across part of the Bournemouth frontage.
6. The Cabinet paper for Bournemouth Beach Management, 28<sup>th</sup> January 2015, is included as a background document to this paper.
7. Phase 1 of the project was subsequently approved by the Environment Agency in October 2015 and confirmation of the overall funding approval for Phase 1, including the value of the Council's Partnership Funding as the 18% contribution to the project, was confirmed in December 2015 with a total scheme cost of £16.8m. A condition of the FDGiA funding for Phase 1 was that the project would be delivered with at least 10% efficiency realised on the overall profile of projected spend. The overall total funding of the project was 82% through Flood Defence Grant in Aid (FDGiA) and 18% through Partnership Funding from the Council. In order to mitigate the capital commitment from the Council, officers secured a £1m allocation from the Wessex Regional Flood & Coastal Committee (WRFCC) from the Local Levy (LL) fund as a contribution to this partnership funding, leaving £1.6m direct capital contribution from Bournemouth Borough Council.
8. Phase 1 has delivered 1597 residential households in the BCP Council area that have a reduced risk from coastal erosion.
9. Future Council capital contributions to Phase 2 (2020+) onwards were not committed at the time of submitting the Phase 1 business case, given the time horizons of the programme. However, it was acknowledged in the Phase 1 business case that similar funding arrangements and contribution splits were likely to be required to satisfy national government future FDGiA requirements.
10. During the first delivery year, 2015/16, the Environment Agency took an opportunity to invest a greater proportion of FDGiA in lieu of the Partnership Funding from either the WRFCC Local Levy or the Council's Resources. This covered 100% of the available funding and included a reprofile to cover early project expenditure.

11. In a response to the additional 'Strengthening Fund' made available by the Department for Environment, Food and Rural Affairs (Defra) for the Environment Agency's national Capital Investment Programme, the Council were successful with an application to increase the programme for Phase 1 for the construction of an additional five life expired timber groynes.
12. Works under Phase 1 of the project were substantially complete in May 2019 and included the replacement of 30 life-expired timber groynes and a targeted beach replenishment campaign to the west of the Boscombe Pier frontage that involved the dredging and placement of 240,000m<sup>3</sup> of marine grade natural sands and gravels.

### **Poole Bay Beach Management Phase 2 & 3 (2020/21 – 2030/31)**

13. Phase's 2 and 3 of Poole Bay BMS covers the period from 2020/21-2030/31 and seeks to continue from the work successfully delivered under Phase 1. The Environment Agency (EA) (as the Government's administrator of FDGiA) has proposed that Phase's 2 and 3 are brought together as one programme of works, a recommendation supported by Council officers, in order to maximise cost efficiencies and provide confidence in delivery.
14. The scheme elements will consist of at least two beach replenishments, the replacement of further life expired timber groynes and major capital works to repair/replace Hengistbury Head Long Groyne. The lateral extents of the project area spans from the Sandbanks peninsular in the West to the Hengistbury Head Long Groyne in the East.
15. The delivery of Poole Bay BMS Phases 2 and 3 provides substantial benefit across all three previous Borough Council Areas. The 'Sustain' approach of regular beach replenishments and a groyne field system is designed to reduce and delay the onset of erosional losses which would otherwise occur.
16. For Christchurch specifically, the works elements to repair and upgrade Hengistbury Head Long Groyne (HHLG) are essential to ensure that the position and influence of this structure is maintained. Without HHLG, morphodynamic change would likely occur to the Christchurch frontage and the narrow channel entrance known as 'the run'. Without repairs to HHLG the Christchurch frontage would be subject to increased wave exposure, with the associated increase in flood and coastal erosion risk.
17. The managed 'Sustain' approach to Poole Bay also reduces the risk of coastal erosion at Double Dykes, in turn limiting the risk of a sea breach in to Christchurch Harbour. The consequence of a sea breach, creating a secondary tidal inlet would be profound on the current functioning of the harbour.
18. An Outline Business Case (OBC) in accordance with HM Treasury's 5-case model is being prepared for submission to the EA for the next phase, building on previous business case submissions and incorporating lessons learnt and advances in understanding of coastal science and engineering. As BCP Council are a Local Authority Risk Management Authority there is no requirement for a subsequent Full Business Case for Phase 2&3 combined to be submitted due to the value of the Outline Business Case.
19. The implementation of this project over 100 years will realise over £1Billion of present value economic benefits across BCP. Over two thirds of this value is from

erosion losses avoided whilst around a third of this value is derived from beach amenity recreation benefits.

20. Phase 2 & 3 of the project will deliver a combined 3358 residential households in the BCP Council area that will subsequently have a reduced risk from coastal erosion.
21. It is condition upon Defra that the Government's FDGiA funding settlement will realise a minimum of 15% partnership funding contributions to its overall capital programme, with the rationale that those that are set to benefit from FDGiA scheme investment should likewise contribute. Accordingly, the Grant Memorandum for Local Authorities sets out the requirement to secure reliable commitments from funding partners.
22. The Phase 1 business case calculated the contribution value required from local (Bournemouth Borough Council /Local Levy) funding sources by using the EA's partnership funding (PF) calculator. The algorithm within the PF calculator considers all scheme present value costs and benefits and assigns a FDGiA grant payment rate based on this overall benefit cost ratio but, with additional weighting given to the number of residential properties better protected from coastal erosion. The calculator showed that an 18% contribution was appropriate based on the premise that local contributions should be equivalent to the beach amenity benefit proportion of the PF score.
23. Discussion has been had with WRFCC and once again, the committee are prepared to support the project, recognising the local regional importance. The current Local Levy Indicative Programme has assigned £2.025m to the Phase 2 & 3 project.
24. The Phase 2 & 3 project costs are still being finalised as outline design options are refined, however, anticipated project cash costs are currently estimated at £36m. Applying the 18% local funding contribution to the PV costs would require c.£5.3m of partnership funding to be found, of which the £2.025m Local Levy has already been indicatively allocated. This would leave a contribution value of £3.3m to be met by BCP Council.
25. Capital Programme Board held on the 9<sup>th</sup> July considered the financial implications of the Outline Business Case for Phase 2 & 3, subsequently approving the inclusion of the indicative spend profile detailed (covered under Summary of Financial Implication) into the Medium Term Financial Plan and for decision at Cabinet and Full Council.
26. The BCP Council project team have attended a briefing session with the Environment Agency's Large Project Review Group (LPRG) to discuss the Outline Business Case for Phase 2 & 3 pre-submission. The feedback from the review group has been very positive in terms of both the overall cost benefit of the scheme, considering capital expenditure against outcome flood risk erosion measures achieved, and the deliverability of the project from both a technical and construction works planning basis. Subject to Cabinet and Council decisions the BCP Council project team have requested the Outline Business Case submission be considered by the LPRG group during the November cycle of meetings.

## Summary of financial implications

27. The gearing effect made possible by BCP Council's capital contribution of £3.3m. will unlock £33m of combined government FDGiA and Local Levy, which in turn realises in excess of £265m of economic benefit over the next 30yrs. This would provide an effective 80.3 Benefit Cost Ratio to BCP's capital investment.
28. The economic benefit of this project will be realised across the full extent of the new BCP Council area.
29. The profile of spend indicated in the following table overleaf provides a forecast of spend that considers both the need for construction works to ensure a level of ongoing coastal protection is provided and the indicative profile of FDGiA that has been programmed by the Environment Agency. The profiling may be subject to change dependent upon the in-year availability of both FDGiA and Local Levy and the BCP Council Partnership Contribution will be continuously considered in-line with these fund commitments.
30. The Council's £3.3m capital contribution to the scheme will be funded from Capital Resources. £360k will be earmarked to the project from the Council's approved annual Corporate Revenue Contribution to Capital for each of the 7 years of the project (total £2,520k). In addition, an upfront contribution of £780k will be made from unallocated Capital Reserves in 2020/21.

| <b>Funding Body</b>     | <b>20/21</b>  | <b>21/22</b>  | <b>22/23</b>  | <b>23/24</b>  | <b>24/25</b>  | <b>25/26</b>  | <b>26/27</b>  | <b>Total</b>   |
|-------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
|                         | <b>£k</b>     | <b>£k</b>     | <b>£k</b>     | <b>£k</b>     | <b>£k</b>     | <b>£k</b>     | <b>£k</b>     | <b>£k</b>      |
| <b>EA FDGiA</b>         | 6,380         | 4,903         | 5,001         | 2,931         | 1,514         | 8,360         | 1,575         | <b>£30,664</b> |
| <b>WRFCC Local Levy</b> | 421           | 324           | 330           | 194           | 100           | 552           | 104           | <b>£2,025</b>  |
| <b>BCP</b>              | 687           | 528           | 538           | 315           | 163           | 900           | 169           | <b>£3,300</b>  |
| <b>TOTAL</b>            | <b>£7,488</b> | <b>£5,755</b> | <b>£5,869</b> | <b>£3,440</b> | <b>£1,777</b> | <b>£9,812</b> | <b>£1,848</b> | <b>£35,989</b> |

## Summary of legal implications

31. There is a requirement for BCP Council as the Coast Protection Authority to implement appropriate works under the local Flood & Coastal Erosion Risk Management Strategies, namely the Shoreline Management Plan (SMP2) 2011 and the Poole & Wareham FCRM Strategy 2014.

## Summary of human resources implications

32. BCP Council are able to deliver Phase 2 & 3 of the project from a combination of in-house staff and the technical support of the Council's professional services contract.

### **Summary of environmental impact**

33. The BCP Council project team have undertaken an Environmental Screening report and have been advised by the Planning Authority that a full Environmental Statement for the coastal protection works under Phase 2 & 3 combined in the Outline Business Case will not be required.
34. The project will require all relevant approvals, licence and consents as required for coastal defence works of this nature through the Marine Management Organisation (MMO), Natural England and BCP Council as the Planning Authority.

### **Summary of public health implications**

35. There are no public health implications arising from this report.

### **Summary of equality implications**

36. There are no equality implications arising from this report.

### **Summary of risk assessment**

37. Without the continuation of coast protection works, over the next 100 years, significant numbers of residential and commercial properties would be lost to erosion along with highways and supporting infrastructure. The potential adverse impact to the tourism economy and amenity benefit would be of a scale of local, regional and national importance.

### **Background documents and information**

Shoreline Management Plan (SMP2)

[www.twobays.net](http://www.twobays.net)

Strategy Study

<https://www.gov.uk/government/publications/poole-flood-and-coastal-erosion-risk-management-draft-strategy>

Beach Management Scheme

<https://www.bournemouth.gov.uk/AttractionsLeisure/BeachesandWaterfront/BeachManagementScheme/BeachManagementScheme.aspx>

Bournemouth Borough Council Cabinet paper for Bournemouth Beach Management 28<sup>th</sup> January 2015.